

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN IDENTITY
FORMATION AND COPING WITH STRESS

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Two concepts which have been the subject of significant theoretical analysis and empirical research are ego identity and coping with stress; few studies, however, address the interrelationship between these two psychosocial processes. The primary objective of this study was to investigate the nature of this relationship.

I. THEORETICAL BACKGROUND

The concept of identity formation was first introduced by Erik Erikson (1950) thirty-five years ago, with the formulation of his psychosocial theory of development. In this theory, Erikson (1950, 1959, 1968) suggests that personality development evolves epigenetically, following a ground plan of eight sequential stages, extending throughout the entire life span. Each stage is characterized by a developmental task to be mastered or resolved; resolution may be either adaptive or maladaptive, and the nature of this resolution impacts upon the ability of the individual to master the subsequent stage of development.

The fifth stage of development, which occurs during adolescence, has been the major focus of Erikson's work (1950, 1959, 1968). The developmental task to be mastered during this stage is identity achievement, described by Erikson as a sense of distinctiveness and self-consistency; continuity of self over time; and a sense of psychosocial reciprocity. According to Erikson, successful mastery of this task is crucial not only for the mastery of the subsequent developmental task (intimacy versus isolation), but for overall psychosocial functioning as an adult.

Empirical investigation of the relationship between identity achievement and adult psychosocial functioning indicates that a positive and significant relationship exists between strength of identity achievement and the ability to form intimate interpersonal relationships (Orlofsky, Marcia, and Lesser, 1973; Fitch and Adams, 1983). A relationship has been established, as well, between identity achievement and such aspects of adult psychosocial functioning as academic achievement (Cross and Allen, 1970), cognitive style (Waterman and Waterman, 1974), locus of control (Waterman, Buebel, and Waterman, 1970), and psychological adjustment (Neuber and Genthner, 1977; Wilkerson, Protinsky, Maxwell, and Lentner, 1982). Limited research has been conducted regarding the relationship between one area of psychological adjustment, coping with stress, and identity achievement; however, the research which has been conducted establishes the existence of a positive relationship between strength of identity achievement and ability to cope with the demands of college life (Mandell, 1979). Additional research in this area is indicated, and it is upon the relationship between identity achievement and coping with stress that this study has focused.

Several approaches exist to the understanding and measurement of the process of coping with stress, e.g. coping as a defense, coping as a personality trait, and situation-specific coping (Folkman and Lazarus, 1980). In a comprehensive and critical review of coping research, Folkman and Lazarus (1980; in press) discuss the limitations of each of these approaches; they identify flaws such as the lack of generalizability, measurement of typical, rather than actual, coping responses, and the measurement of coping as a unidimensional process. These authors offer an alternative model of coping, the cognitive-phenomenological approach (Lazarus, 1966), which they suggest resolves some of the major liabilities of the other approaches.

According to these authors (Lazarus, 1966; Folkman and Lazarus, 1980; in press), coping is a two-dimensional process; it involves appraisal -- which refers to the cognitive process by which an event is evaluated in terms of what is at stake and what coping resources and options are available, and coping -- which refers to cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them. Coping efforts serve two main functions: management of the person-environment relationship which is the source of stress (problem-focused coping), and regulation of stressful emotions (emotion-focused coping). Stress arises as a function of the appraisal process, and is determined by the evaluation of what is at stake and what coping resources are available.

According to Folkman and Lazarus (in press), coping with stress involves both problem- and emotion-focused coping. Predominance of one type of coping over the other is a function of the appraisal process; events which are appraised as having few possibilities for beneficial change are more likely to induce emotion-focused modes of coping, while events which are appraised as having the potential for amelioration by action are more likely to induce problem-focused modes of coping.

Two factors which impact upon the appraisal process are situational and personality variables. Situational variables may include such factors as ambiguity and support networks; personality variables include such factors as patterns of motivation and personal control (Folkman and Lazarus, 1984). Situation and personality variables may also affect the coping process; according to Folkman and Lazarus (1980), people tend to use more problem-focused coping in work situations, whereas in health situations mixed coping appears to predominate. These authors also found (in press) that certain types of emotions (e.g. emphasizing the positive) are more highly correlated with problem-focused coping than others (e.g. self-blame, wishful thinking).

One personality variable which may be related to the coping process is identity. According to Antonovsky (1979), a crucial factor in the coping process is a "sense of coherence," a psychosocial orientation toward the world consisting of three parts: comprehensibility, the degree to which the individual finds the world to be consistent and orderly; manageability, the sense that one can cope with events through active use of their own resources or with outside help; and meaningfulness, the feeling that life's demands are worthy of commitment. This sense emerges as a product of life experiences which, in turn, are influenced by generalized resistance resources. These may be physical, emotional, cognitive, evaluative, or relational in nature, and develop as a product of childrearing patterns, social roles, and other idiosyncratic factors. Generalized resistance resources not only facilitate the development of a sense of coherence, but are, in turn, remobilized by the sense of coherence in response to stressful experiences.

One of the generalized resources described by Antonovsky (1979) is identity achievement; according to this author, identity achievement may be a necessary precondition for the development of a strong sense of coherence. Formation of a sense of coherence begins in childhood, but remains tentative until adolescence, when identity issues are resolved. With the formation of a stable identity and life style comes permanence and, hence, a definitive sense of coherence is attained. With the stabilization of the sense of coherence, the ability to cope with life's stress is strengthened, as well.

According to Antonovsky's theory (1979), identity formation is a necessary precondition for the development of a sense of coherence; in addition, as a generalized resistance resource, identity may be mobilized, as well, in response to stressful life events. Antonovsky presents a theoretical framework for the coping process; it is the purpose of this study to investigate empirically the existence of a relationship between identity formation and coping with stress.

The major objective of this study is to determine whether a relationship exists between identity achievement and the coping process. Several research questions were investigated in this study; only one will be discussed at this time. This question focuses upon the relationship between identity formation and 1) appraisal of events as capable, or not, of being changed, 2) the predominance of problem-focused coping activities, 3) the predominance of emotion-focused coping activities, in general, and 4) the predominance of emotion-focused activities which are highly correlated with problem-focused activities, in particular. It was hypothesized that a relationship exists between these three variables and strength of identity achievement.

II. METHODOLOGY

This study was conducted utilizing a survey design. Subjects were administered a questionnaire composed of four instruments: Ego Identity Scale (Dignan, 1963); Adjective Check List (Dignan, 1963); College Student Life Events Scale (Sandler and Lakey, 1982); and Ways of Coping Checklist (Folkman and Lazarus, in press). Demographic information was collected, as well. The scales utilized in this study were standardized scales, whose reliability and validity (both content and construct) were established by their authors. Reliability was reassessed, as well, using Cronback's (1970) alpha coefficient.

The Ego Identity Scale (Dignan, 1963) consists of 50 items; subjects were asked to indicate whether each of these items is true or false as applied to them. This scale yields a maximum score of 50; higher scores reflect a higher degree of identity achievement. Each item has a weight of one; directionality (i.e. which response is indicative of higher identity achievement) was determined by judges selected by the author of this study. Reliability was .76.

The Adjective Check List (Dignan, 1963) consists of 20 pairs of adjectives, which describe a trait and its opposite; each pair is rated on a six-point scale. Scores on each pair of adjectives range from one to six; higher scores are generally associated with a more positive self-description. This scale was used in this study to tap scores on two personality dimensions related to identity; however, these results will not be reported at this time.

The College Student Life Events Scale (Sandler and Lakey, 1982) consists of 111 items, identified by college students as high-impact events which had occurred to them in the past year. In this study, 50 negative items were selected from the original scale; subjects were asked to indicate whether each of the items had occurred to them in the past year, and whether they believed that they could change the event in a way which would be more beneficial to them.

This scale was used as a checklist of stressful life events. In addition, an appraisal score was calculated based upon this scale. The appraisal score was calculated in order to obtain a measure of the tendency of the individual to appraise stressful events as capable or not of being changed. It was calculated by obtaining a percentage of all stressful events occurring to the individual which were perceived as capable of being changed.

The Ways of Coping Checklist (Folkman and Lazarus, 1980) consists of 67 items, describing a broad range of both cognitive and behavioral coping strategies that may be used in a specific stressful episode. When completing this checklist, subjects were asked to indicate their use of specific coping strategies in relation to a stressful episode. Events were selected from the life event schedule which was completed by the subjects first. For the purposes of this study, subjects were asked to complete the checklist two times: once based upon an event which they believed they could change so as to be more beneficial to them, and once based upon an event which they did not believe could be changed.

Items on this scale were divided into several categories, based upon factor analysis conducted by the original authors. First, they were divided into dichotomous categories, in which 24 items were identified as problem-focused coping mechanisms, and 34 items were identified as emotion-focused coping mechanisms. In addition, these items were divided into eight subscales, one of which was identified as problem-focused in nature; the other seven were identified as emotion-focused coping mechanisms. Both categorizations were used for the purposes of this study. The reliability of these categories was assessed in this study; for events appraised as capable of being changed, reliability was .81 and .86 respectively. For events appraised as not capable of being changed, reliability was .88 and .89 respectively. Reliability scores for the eight scales ranged from .56 to .85. On one scale, a reliability score of .35 and .36 was obtained; this scale was discarded from this study.

A new scoring method for this scale was introduced in this study by this author. According to the authors of this scale, scores are calculated by summing the ratings on each item. In this study, a second method was designed to measure the predominance of problem-focused coping mechanisms; scores involved the calculation of the percentage of all coping mechanisms utilized which were problem-focused in nature. The results reported at this time are based upon this second scoring method.

The sampling technique utilized in this study was purposive. All subjects were students at Ohio State University, and represented three age groups: college freshmen, age 17-19; college seniors, age 21-22; and graduate students, age 24-29. Subjects were located through contacts with professors and administrative personnel at the university, and represent approximately twenty departments of the university. A total of 271 subjects participated in this study; all were volunteers.

III. DATA ANALYSIS

The research question investigated in this study focuses upon the relationship between identity achievement, appraisal, and type of coping mechanisms utilized in dealing with stressful life events. This question dealt specifically with the following issues:

WHAT IS THE RELATIONSHIP BETWEEN IDENTITY ACHIEVEMENT AND:

1. APPRAISAL OF A SITUATION AS CAPABLE, OR NOT, OF BEING CHANGED?
2. THE PREDOMINANCE OF PROBLEM-FOCUSED COPING ACTIVITIES?
3. THE PREDOMINANCE OF EMOTION-FOCUSED COPING ACTIVITIES?
4. THE TYPE OF EMOTION-FOCUSED COPING ACTIVITIES (HIGHLY CORRELATED, OR NOT, WITH PROBLEM-FOCUSED COPING ACTIVITIES) UTILIZED BY THE INDIVIDUAL?

The first part of this question focuses upon the relationship between identity achievement and appraisal. For this analysis, a Pearson correlation was computed between scores on the Ego Identity Scale and appraisal scores (i.e. number of events perceived as capable of being changed / total number of stressful events occurring to the individual x 100). An insignificant correlation of .05 ($p < .199$) was found, suggesting that no relationship exists between identity achievement and the tendency to appraise stressful life events as capable, or not, of being changed.

The second part of this question focuses upon the relationship between identity achievement and the predominance of problem-focused coping mechanisms. For this analysis, a Pearson correlation was computed between scores on the Ego Identity Scale and scores on the Ways of Coping Checklist. For the event appraised as capable of being changed, a weak but significant correlation of .23 ($p < .001$) was found between scores on the Ego Identity Scale and predominance of problem-focused coping mechanisms. For the event that could not be changed, a marginally-significant correlation of .10 ($p < .063$) was found. These results suggest that a relationship exists between identity and predominance of problem-focused coping.

The third part of this question focused upon the relationship between identity achievement and the predominance of emotion-focused coping mechanisms. The predominance of emotion-focused coping mechanisms was scored in the same manner as the predominance of problem-focused coping mechanisms; the number of emotion-focused coping mechanisms was divided by the total amount of coping mechanisms and multiplied by 100. This score is simply a reverse score of the predominance of relationship coping scores; consequently, correlations scores were the inverse of each other. Thus, the correlation between identity and emotion-focused coping for the incident appraised as capable of being changed was -.23 ($p < .001$), and for the event appraised as not capable of being changed was -.10 ($p < .063$, marginally significant). These results suggest that the higher the identity score, the less emotion-focused mechanisms were used (see Table 1).

The final part of this question deals with the correlation between identity achievement and the types of emotion-focused coping activities found to facilitate problem-focused coping. According to Lazarus and Folkman (in press), certain types of emotion-focused coping mechanisms can facilitate problem-focused coping, if used to manage emotions that might otherwise be an impediment to problem-focused coping. In their study, they note a strong correlation between problem-focused coping and emphasizing the positive ($r = .58$), and seeking social support ($r = .64$). This relationship was reassessed in this study; correlations are presented in Table 2. The results indicate that a higher correlation was found with the seeking social support and focusing on the positive subscales than the other subscales. These results support those reported by Lazarus and Folkman (in press).

A Pearson correlation was computed, as well, between identity achievement and each of the above subscales, in an attempt to assess whether a relationship exists between identity and choice of coping mechanisms, particularly those which facilitate problem-focused coping efforts. The results of this analysis are presented in Table 3.

For events that could be changed, a significant negative correlation was found between ego identity scores and four emotion-focused coping subscales: wishful thinking, detachment, self-blame, and keeping to self. The higher the identity, the less likely was the individual to use these coping mechanisms. However, no correlation was found with the other two subscales, which have been found to be most strongly correlated with the problem-focused coping subscale. For events that could not be changed, a significant negative correlation was found between ego identity scores and three emotion-focused subscales: wishful thinking, detachment, and keeping to self. A marginally-significant negative correlation was also found with the self-blame subscale; in addition, a marginally-significant positive correlation was found with the seeking social support subscale. These results are similar to those reported for events that could be changed.

These results suggest that no relationship exists between identity and use of coping mechanisms which are highly correlated with problem-focused coping; a negative relationship does, however, exist between identity and coping mechanisms which are not highly correlated with relationship coping. The higher the identity, the less use was made of these coping mechanisms.

IV. DISCUSSION AND CONCLUSIONS

The results of this study indicate that no relationship exists between identity score and the tendency to appraise stressful life events as capable, or not, of being changed. They also suggest that a weak but significant relationship exists between identity achievement and coping with stress; the higher the identity score, the higher the percentage of problem-focused coping mechanisms used to cope with specific stressful life events, and the lower the percentage of emotion-focused coping mechanisms utilized. Finally, a significant negative relationship was found between identity and the four emotion-focused coping mechanisms not highly correlated with problem-focused coping: wishful thinking, detachment, self-blame, and keeping to self. The higher the identity scores, the less likely was the individual to utilize emotion-focused coping mechanisms not highly correlated with problem-focused coping efforts.

The results of this study provide valuable information regarding the relationship between identity achievement and the coping process. Although only modest correlations were found between identity achievement and coping, these relationships were highly significant. These results indicate that additional research is required; however, the results of this study still have major implications for the field of social work.

The significance of this research lies in its potential to contribute both to theory development and to social work practice. From a theoretical perspective, additional evidence is provided for the relationship between identity achievement and adult psychosocial functioning; evidence of the impact of personality variables upon the coping process is provided, as well. On a practical level, this study may provide valuable information for the

social work practitioner dealing with clients in stress. Clinical treatment is a multi-faceted process, which involves psychosocial assessment of the client situation and the selection of appropriate treatment techniques. More comprehensive knowledge of the impact of selected personality variables upon the coping process will hopefully redirect and expand the interventive focus of the social work practitioner, allowing for greater practitioner effectiveness.

The treatment of stress problems is a growing field. "Today, it is no longer unusual for clinicians to view treatment as training in coping skills and an opportunity to help the person substitute effective forms of coping for counterproductive ones" (Lazarus and Folkman, 1984, p. 317). Certain therapists teach problem-solving skills, while others provide cognitive preparation for stressful encounters (Lazarus and Folkman, 1984). The results of this study suggest that the ability to cope with stress is related to identity achievement. These findings provide an additional focus for stress treatment.

TABLE 1. PEARSON CORRELATIONS BETWEEN IDENTITY AND % OF
PROBLEM-FOCUSED AND EMOTION-FOCUSED COPING MECHANISMS

	<u>IDENTITY ACHIEVEMENT</u>
<u>% PROBLEM-FOCUSED COPING</u>	
Y*//	.23+
N**/	.10-
<u>% EMOTION-FOCUSED COPING</u>	
Y/	-.23+
N/	-.10-

* = event appraised as capable of being changed

** = event appraised as not capable of being changed

+ = $p < .001$

- = $p < .07$ (marginally significant)

TABLE 2. PEARSON CORRELATIONS BETWEEN IDENTITY SCORES AND 7
EMOTION-FOCUSED COPING SUBSCALES

	<u>PROBLEM-FOCUSED COPING</u>
<u>Y*/</u>	
WISHFUL THINKING	.32
DETACHMENT	.18
SEEKING SOCIAL SUPPORT	.54
FOCUSING ON THE POSITIVE	.57
SELF-BLAME	.26
KEEP TO SELF	.16+
<u>N**/</u>	
WISHFUL THINKING	.33
DETACHMENT	.24
SEEKING SOCIAL SUPPORT	.52
FOCUSING ON THE POSITIVE	.49
SELF-BLAME	.56
KEEP TO SELF	.22+

* = event appraised as capable of being changed

** = event appraised as not capable of being changed

+ = $p < .005$

all other correlations - $p < .001$

TABLE 3. PEARSON CORRELATIONS BETWEEN IDENTITY SCORES AND 7
COPING SUBSCALES

	<u>IDENTITY SCORES</u>
<u>Y*/</u>	
PROBLEM-FOCUSED SUBSCALE	.06
WISHFUL THINKING SUBSCALE	-.33+
DETACHMENT SUBSCALE	-.12#
SEEKING SOCIAL SUPPORT SUBSCALE	.06
FOCUSING ON THE POSITIVE SUBSCALE	-.02
SELF-BLAME SUBSCALE	-.25+
KEEP TO SELF SUBSCALE	-.27+
<u>N**/</u>	
PROBLEM-FOCUSED SUBSCALE	-.03
WISHFUL THINKING SUBSCALE	-.27+
DETACHMENT SUBSCALE	-.11#
SEEKING SOCIAL SUPPORT SUBSCALE	.09-
FOCUSING ON THE POSITIVE SUBSCALE	-.00
SELF-BLAME SUBSCALE	-.08-
KEEP TO SELF SUBSCALE	-.21+

- * = event appraised as capable of being changed
 ** = event appraised as not capable of being changed
 + = $p < .001$
 # = $p < .07$
 - = marginal significance, $p < .069$

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